Service-Instructions

DELMONICO 1091-1221-981-2001 (22512)

I. Technical Data:

Supply voltage:

Only for 117 volts AC/60 cs.

Tube complement:

ECC 85(6AQ8), ECH 81(6AJ8), EF 89(6DA6), EABC 80(6AK8), EL 84(6BQ5), ECL 86(6GW8), EAM 86 (6GX8).

selenium rectifier B 250 C 75.

Fuse:

1.6 amps.

Dial lamps:

2 each 7 volts/0.3 amps.

II. Switch the set to push-pull operation (STEREO button released)

III. Dial Pointer Adjustment:

Tune AM and FM drive to stop at the low frequency end and set both pointers to the corresponding reference marks on the dial.

IV. Preparations for Alignment:

- 1. Set controls for full volume, full basses and full trebles with tonality button released.
- 2. Connect output meter reading 1.5 volts to terminals for ext. speaker.
- 3. Leave ferrite antenna inoperative.

V. Alignment of IF transformers 472 kc:

Normally no adjustments are required as the circuits will hardly be detuned by themselves. However, if necessary adjust cores of IF transformer for max. deflection.

VI. For alignment of IF rejector circuit, SW and MW ranges see IX Alignment Chart

VII. Alignment of IF transformer 10.7 mc:

Set signal generator to 10.7 mc without modulation and maintain a 2 volts DC output of ratio detector during the alignment procedure.

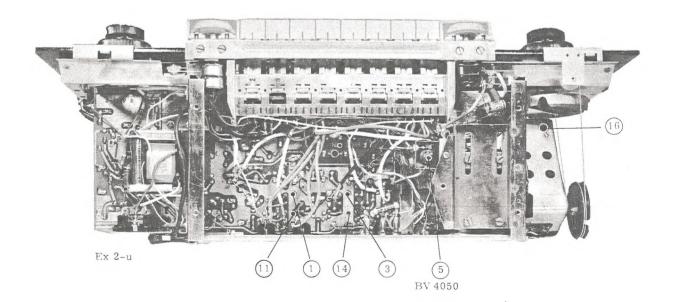
Align according to IX Alignment Chart to ensure optimum symmetry of the IF response curve.

Attenuations should be made by a capacitor of 0.005 mf in series with a resistor of 5000 ohms.

VIII. Alignment of VHF part:

- 1. Tune receiver to 94 mc. Apply an unmodulated signal of 94 mc and adjust capacitors of oscillator (17) intermediate (18) and radio frequency circuit (19) for max. deflection.
- 2. For neutralizing disconnect the lead to point 2 of VHF part temporarily. Neutralization is accomplished by alternate adjustments at points 18 and 20 until no better results may be obtained.

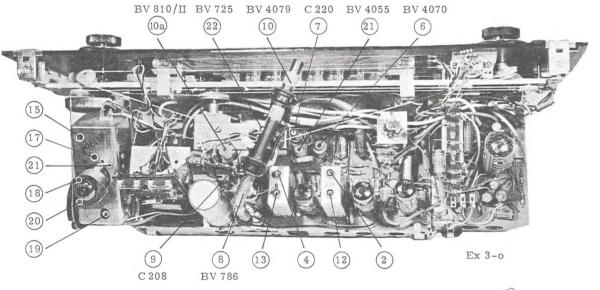
Adjust at point 20 for min. deflection with minus 20 volts DC applied to point 2 of VHF part and adjust at point 18 for max. deflection without the DC voltage applied. Secure cores with wax after completing neutralization.

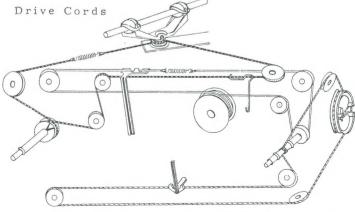


	Sig. Gen. Connection	Modu- lation	Range Button	Freq Sig. Gen.	uency Receiver	Alignment Points	Location	Adjust to	Measurement according to
AM t				472 kc	560 ke	core 1 in BV 4087 core 2 in BV 4087 core 3 in BV 835 core 4 in BV 835	on bottom on top on bottom on top	Maximum	I
	through		MW	472 kc	560 kc	core 5 in BV 4050	on bottom	Minimum	1
	artif.ant. to ant.and	30 p.c.		520 kc 1600 kc	520 kc 1600 kc	core 6 in BV 4070 capacitor 7 (C 220)	on top on top		
	ground	p.c.		560 kc	560 kc	coil 8 in BV 786	on top		II
	terminals			1600 kc	1600 kc	capacitor 9 (C 208)	on top	Maximum	I
			LW	200 kc	200 kc	coil 10 in BV 4079	on top		II
			sw	200 kc	200 kc	core 10a in BV 810/II			I
				6 mc	6 mc	core 21 in BV 4055	on top		Ia
				7 mc	7 mc	core 22 in BV 725	on top		14
	through 0.005 mF to grid 1 of ECH 81					core 11 in BV 4087	on bottom	3 turns to the left	
		no mod.				grid circuit EF 89	G1 EF 89	attenuate	
						core 12 in BV 4087	on top	Maximum	
						core 14 in BV 835	on bottom	Maximum	III
FM			FM	10.7 mc	99 mc	grid circuit EF 89	G1 EF 89	remove atten.	
L IVI			FW	10.7 me	99 mc	plate circuit ECH 81	A(Hex)ECH 81	attenuate	
						plate circuit EF 89	A EF 89	attenuate	
						core 13 in BV 835	on top	Maximum	
						plate circuit ECH 81	A(Hex)ECH 81 A EF 89	remove atten.	
						plate circuit EF 89 core 11 in BV 4087	on bottom	remove atten.	TXT
	radiated sig.								IV
	on tube ECC85	no				core 15 VHF part	on top	3 turns to the left	
FM	(ungrounded shield)	mod.	FM	10.7 mc	99 mc	core 16 VHF part core 15 VHF part	on bottom on top	Maximum	III
	VHF ant.	no		105 mc 99 mc	105 mc 99 mc	capacitor 17 capacitor 18 VHF	on top on top	Maximum	
FM.	terminals	mod.	FM	99 mc	99 mc	capacitor 20	on top	Minimum	V
	terininais			99 mc 98 mc	99 mc 98 mc	core 19 part	on top on top	Maximum	III

Measurements:

- I. AC voltmeter reading 1.5 volts across terminals for ext. speaker.
- Ia. Idem and bandspread pointer set to zero when aligning SW range.
- II. As under I and positioning the coil with ferrite antenna operative.
- III. VTVM between joint of C406/R406 and ground.
- IV. 2 resistors of 100 000 ohms each in series between joint of C406/R406 and ground. VTVM between junction of resistors and joint R403/C402.
- V. As under III with abt. minus 20 volts DC applied to point 2 of VHF part and increased sig. gen. output.





10616/3W

Type 22 512
Scheltbild AD 1-1100
Blatt 1

Pos	Artikel	Beschreibung	Bauvorschrift.	Hollerith Nummer	Zeichnungs Nr.	Brutto	Netto
		Zubehür					
	Drehimepf	10 Ø Kuhbier Nr. 14250 Typ 131 Farbe 1	18	3e3o 134	5-9o2o	-,80	
	Drehknopf	6 % Kuhbier Nr. 1424e Typ 131 Farbe	118	3030 133	5-9019	-,75	
	Brehknopf/Stereo-Balance	Pekalit Nr. 12900 Typ 31 Farbe V 852		3030 135	5-9018	-,65	30
	Ritzel	für Höhen-u.Badregler		4571 017	5-8817	-,25	
	Steckerbuchse	Mab 3o S Hirschmann		2380 027		-,40	
	Steckerbuchse	Mab 50 S Hirschmann		238e o34		-,50	
		Skala und Antrieb	4-3- NO				
	Skele		186 - 00	6550 110	Sk 0-313	4,65	
	AM-Zeiger			357e e27	4-4997	-,15	
	UKW-Zeiger			3570 010	4-2447	-,15	
	FA-Zøiger			3570 026	5-8599	-,05	
	Seilrolle	12/10		4035 028	5-7127	-,10	
	Seilrolle	18,5/15		4035 031	5-8150	-, 10	100
	Seilschwibe	AN CONTRACTOR OF THE CONTRACTO		3005 021	4-4476	-,80	
	Skalenschnur	Fiberglas MC 11 Hausherr, p. m		3105 004	6-62301	-,25m	
	Eug leder	für AH/FM-Antrieb		4025 130	5-8296	-,05	1/2 / 1
	Seilscheibe	M		<i>4015 04-9</i> 3005 022	4-4482	-,90 -,90	
	Anzeigoplättchen			3312 002	5-8858	-,e5	<u>and siyaw.</u>
	Zugfeder	für UKW-Antrieb		4025 612	5-5359	-,03	
3113.3	Zugfeder	FA-Antrieb		4025 096	5-7855	-,05	
	Skalephalter				5-827o	-,05	
							-
1							

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Pas	Artikel	Beschreibung ****	Bauvorschrift:	Hollerith Nummer	ZeichnungsNr	Brutto	Net
-		RF- und Mischteil					-
	UKW-Mischteil	m.Rö.		2180 004	4-4244	31,20	-
	Antennenplatte	gen.			4-4537	-,55	-
	Drucktaster	ungeschaltet (Petrick)		2200 108	2-1028	18,90	
	Drucktaster	kompl.			22500.3	25,50	40.5
	Ferritantenne	kompl.	BV 4054			6,50	
	Ferritapule	<u> </u>	BV 786			-,40	
	Ferritapula		RV 720			-,30	-
	UKW-Antennendrossel		BV 652			-,30	
*5.7	Sperrkreis	472 kllz (ZF-Sperrkreis)	BV 4050			2,10	
	Vorkreisspule	für Kurzwelle	BV 725			-,70	
4	Verkreisspule	für Langwelle	BV 81e/II			1,	
	Ogzillatorspule	für Kurzwelle	BV 4o55			-,65	
	Oszillatorspule	für Mittelwelle	BV 4070			-,75	
217	Drehkondensator	AN, Dau 207 Gi 5,66		1700 025	3-1576	7,45	
		and the same of the same			o transport		1
		AM-FM-ZF Verst. u.Dem.					N 1
	ZF-Bandfilter		BV 835			4,80	
	Ratio-Filter		BV 4087			6,20	
		NF-Teil		and the second s			
	Ausgangstrafo		BV 1163/11			5,75	
	Ausgangstrafo		BV 1163/11			5,75	
	Stereo-Platine	gedruckt		3852 o43	3-1689	1,50	
	2F-NF-Platine			3852 o45	2-985	3,75	1
	u, u	kompl. geschaltet			22500.22	55,90	
	Röhrenfassung	B 8.700.49 Valvo		236o o27	22000.22	-,40	1

Doc	Actual	Beschreibung	Bauvorschrift.	Hollerith Nummer	Zeichnungs Nr.	Brutto	Netto
Pos	Artikel	2x1,3 M2 +log. m.Abgr.		1800 191	4-4691	4,15	
3 1	Lautstarke-Regler		165 1	1800 217	4-5166	4.15	
	øder	2x2oo+8oo kû log. Valvo	165,-1/2				
R 5	Schichtdrehregler	Stereo-Balance		1800 199	5-8876	1,50	
R 2	löhenregler	2x500 k2 pos.log.		1800 218	4-5216	3,65	-
R 3	Baßregler	2x100 kQ neg.log.		1800 219	4-5217	3,65	
							4.1
						agita din 1	741 X 15
		Stromversorgung - Siebung					
	Trockengleichrichter	B 25e C 75 K 4		2060 041		4,75	
	Netztransformator		BV 1167	2400 056		15,45	
220	Trimmerkondensator	3-3o pF 1226 B III o,2 Schwaiger		235o o33		-,45	
406	Elko	2 μF 70/80 V isol. freitr. max. 7,5x20		1600 049		-,65	
509	E1ko	100 μF 30/35 V freitr. isol. max. 14x3		1600 013		-,85	1
511	Elko	2x50 µF 350/385 V Becher m.Schränkl.u.	soliersch.	161o o22		3,60	
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Pos	Artikel	Beschreibung	Bauvorschrift	Hollerith Nummer	Zeichnungs Nr.	Brutto	Netto
		<u>Intern</u>					
	Antriebsachse	kompl.			5-8857	-,90	
	Schwungscheibe	für AM-Antrieb		4050 005	4-2058	1,	
	Hohlachse			4001 053	5-8283	1,	
- which grant children which the disputations	Lagerplatte		· ·	3851 010	5-4537	-,10	
	Schaltnocke	kp1.		4350 007	4-4840	-,25	
	Hohlachse			4001 055	5-8789	3,	
· · · · · · · · · · · · · · · · · · ·	Abdeckung	für Mag. Auge		3301 029	5-8335	-,10	
	Fassung	f.Skalenlampe, Kunstatoff Nr. kg 5243	Stocko	2530 004		-,20	
	Lötsteckverbinder	Weco-Elastik PlNr. 401/LF 2-pel.		4831 002	6-44212	-,20	
	Sicherung	1,6 A 125 V FA 4 Nr. 1252 Wickmann		2120 017	6-75020	1,10	
		7/4					
<u> </u>							
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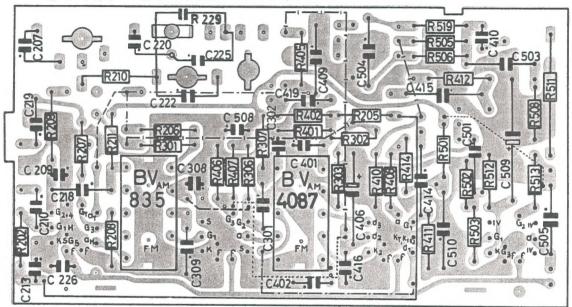
Gedruckte Schaltung für Rundfunkempfänger Printed Wiring for Radio Receivers Câblage Imprimé pour Récepteurs de Radio

Type 22310, 22311, 22312, 22330, 22405, 22323,
Type 22506, 22510, 22511, 22512, 22513, 22514, 22515, 22516, 22520, 22530

PLATINE BOARD ZF-NF 2-985

Bestückungsseite Component Side - Côté Composants

BV 725 BV 4055 BV 4070



ECH 81 EF 89 EA BC 80 EL 84 AD 3-1055/2

R R R	202 205 206 207	1 M 2,2 M 2,2 M 100	R	410	ago * entfällt
R	208	27 k	R	411	10 M
R	209	47k, 1W	R	412	
					1 M
	210	33 k, 1 W	\mathbf{R}	414	220 k
\mathbf{R}	211	1,8 k	R	501	100 k
\mathbf{R}	301	180 k	R	502	820 k
R	302	2,2 M		503	100 k
R	303	1,8 k	10	000	1001
R	306	82 k	R	505	1 k
R	307	1.8 k			
			R	506	1 k
R	401	$270 \mathrm{k}$	R	508	390
R	402	100 k	R	511	1 k, 2 W * 3,3 k
R	405	15 M	-		not used
R	406	39 k	R	512	200 * entfällt - non utilise
R	407	4.7 M	R	513	220
R	408	3.9 k			
_ 0	100	0,011	R	519	12 k

* Änderungen bei den Geräten: 22510,22511,22512 Modifications for models: 22513,22520,22530 Modifications pour modeles:

C 207				4700
C 209			419	
C 210		C	501	0,022 µ
C 213	0,047 μ		503	
C 218				0,1μ * 0,22μ
C 220	330	C	505	3300
C 221	15			4700
C 222	470	C	509	50 μ * 100 μ
C 225	470	C	510	0,1μ
C 301	95		219	
C 302	2200	C	226	4700
C 401	330	C	229	470
	3300 * 39	C	308	2200
C 406	2 μ		309	
	0,01 μ			
C 410	0,033 µ * entfäl	1+ -	not u	ised
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C 414	0,022 μ			
C 415	0,022 μ			

 Änderungen bei dem Gerät 22506 Modifications for model 22506 Modifications pour modèle 22506

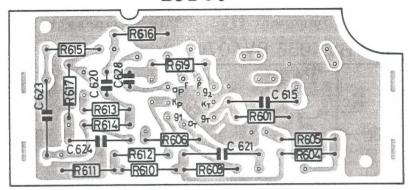
PLATINE STEREO STEREO BOARD 3-1689

Seulement pour modèles:

Nur für die Geräte-Typen: 22506, 22510, 22511, 22512, 22514, 22515, 22516, Only for models: 22513, 22520 und 22530

Bestückungsseite Component Side - Côté Composants

ECL 86

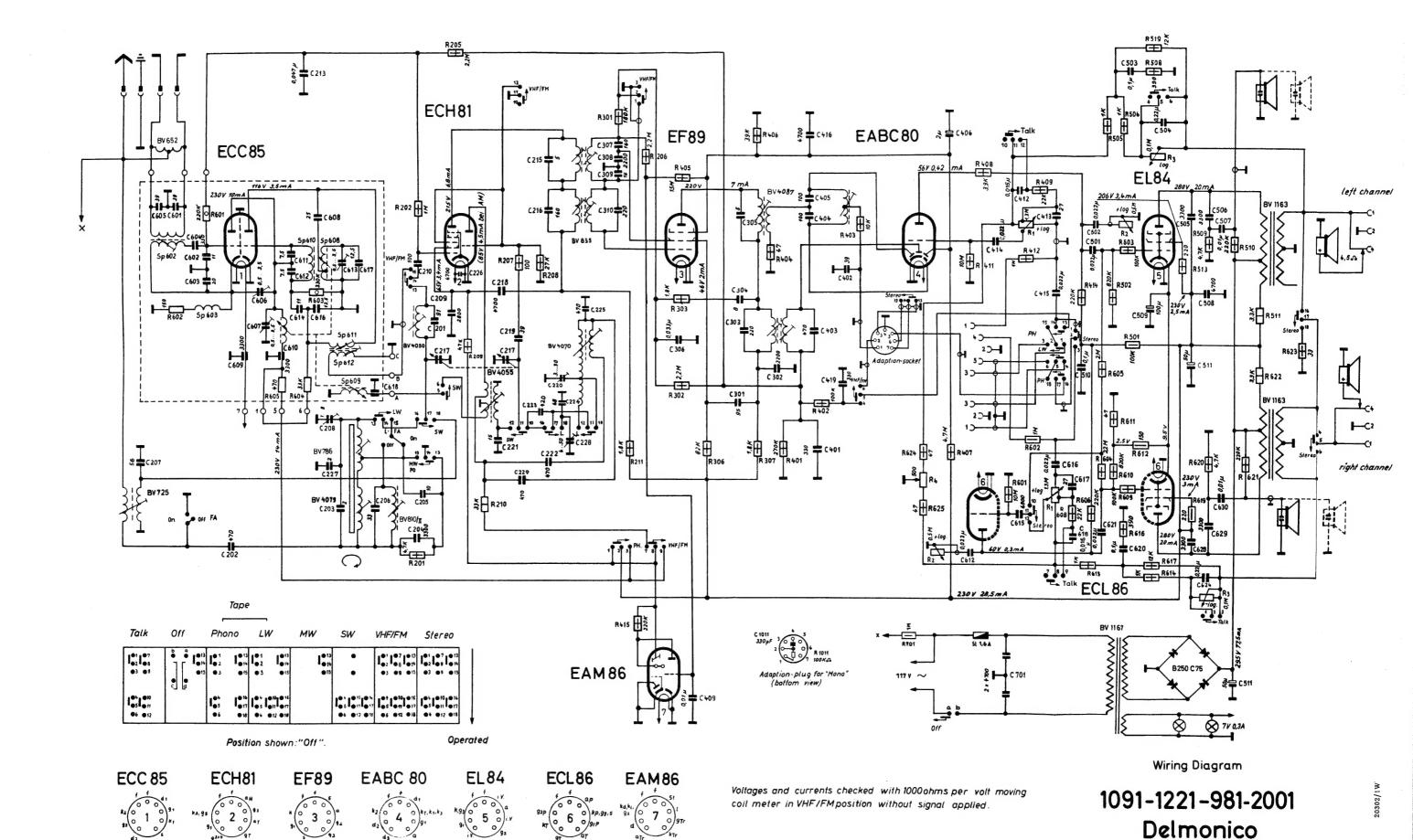


AD 4-1204

R	601	10 M	R	613	1 k	
R	604	2,2 M	R	614	1 k	
R	605	2 M	R	615	470	
R	606	220 k	R	616	390	
R	609	100 k	R	617	12 k	
R	610	820 k	R	619	220	
R	611	47				
R	612	150				

C 615 6800 C 620 0,1 μ C 621 0,022 μ C 623 0,015 μ * C 624 0,22 μ C 628 3300

* bei Gerät 22520 u.22530 C624 0,1 μ for model 22520 u.22530 C624 0,1 μ pour modèle 22520 u.22530 C624 0,1 μ



(tube sockets from below)

"Printed in Western Germany"

AD 1-1100 b 2251266 6/667/669/676